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ARCHITECTURE ON ATTIC VASES

Do we learn anything about Greek architecture from the representations of architecture on Attic vases; anything, that is to say, which we do not know better from extant remains of Greek buildings? It is the purpose of the present paper to argue that a negative answer to this question, if not certain, is at least more probable than an affirmative one.

The Attic vase-painters seldom attempt to render complete buildings. For the most part they content themselves with a mere suggestion, consisting of one or more columns, sometimes with the addition of an architrave, more rarely of an architrave and a frieze, still more rarely of a complete entablature. The care with which these features are drawn varies widely, of course, in different examples. But, with the rarest exceptions, the architecture depicted even on well-executed vases differs remarkably from that known to us by means of extant remains as having existed in Attica in the sixth and fifth centuries B.C. And what is more, this depicted architecture is not uniform in character, but on the contrary exhibits even in the same period, sometimes even on the same vase, a high degree of variability. Thus Doric columns on the vases are generally much slenderer than are the known Doric columns of stone, while on the other hand the two Ionic columns of the Munich cylix published in the *Archäologische Zeitung*, 1878, Pl. 11, are of proportions much stouter than the normal, one of them being less than four diameters in height, as against the normal eight or nine. Capitals exhibit a capriciousness to which the known stone forms afford no parallel; as on the Munich cylix just cited, where the *canalis* is differently drawn in each case, and is in both cases unlike the standard stone form. Regulae and guttae are placed above Ionic, as well as

above Doric, columns, but with seldom a hint of the accurate space-relation to the columns which is characteristic of Doric architecture. In short, the architecture of the Attic vases is an almost lawless architecture.

Two explanations of this state of things are *prima facie* possible. According to one¹ there existed, side by side with the stone architecture known from extant remains, an architecture of wood, employed for dwelling-houses and other common types of buildings. It is these perishable structures which the vase-painters had chiefly in mind and in regard to which they give us some trustworthy information. According to the other view the buildings which served as models for the vase-painters were of stone, or at least had stone columns, conforming essentially to the types that have survived to our time, and the eccentricities of the depicted architecture are evidence of nothing but inaccurate drawing.

No one would think of claiming strict accuracy for the architectural drawing of the vase-painters, and the question is only as to the degree of inaccuracy. Without going into minor details let us consider two matters of fundamental importance. The Attic vase-paintings are supposed by M. Vallois and those who agree with him to demonstrate for the sixth and fifth centuries B.C. the existence and prevalence of wooden columns and the existence of a mixed order, viz. Ionic columns surmounted by a Doric or partly Doric entablature. If the vases do not prove as much as this, they do not prove anything regarding architecture.

The chief evidence for wooden columns is the extreme slenderness of most of the Doric columns on the vases. But these slender columns are used for structures which were probably or certainly of stone. Thus a common subject on black-figured hydrias is a fountain-house,² where women draw water. It is a plausible conjecture, especially as in one example the fountain is labelled "Calirrhoe," that this fountain-house is

¹ This view has been set forth at length by R. Vallois in an article entitled 'Étude sur les formes architecturales dans les peintures de vases grecs' and published in the *Revue archéologique*, XI, 1908, pp. 359 ff. The present article is much indebted to that of M. Vallois.

² E.g. Gerhard, *Auserlesene Vasen*, IV, 307, 308.

intended for the famous Enneacrurus constructed by Pisistratus. Is it credible that an edifice of this character and this importance had columns of wood? Again, on a fine red-figured cylix¹ of the Periclean age we find the temple of Apollo at Delphi indicated by an excessively slender Doric column. Here the actual material is in no doubt.

To this argument it will be answered that, while the testimony of the vase-painters may not be decisive as regards a particular building, their slender Doric columns are good evidence that they had such columns about them and in sufficient numbers to determine their habitual mode of representation. But is this theory of prevalent wooden columns likely? Such columns would have been used, if anywhere, in private houses. Now our knowledge of the ancient Greek house is pitifully meagre, and such hints as to the materials of construction as we do get are from a somewhat later period than that to which the Attic vases chiefly belong. Still these hints deserve to be cited.

Thuc. II, 14: *αὐτῶν τῶν οἰκιῶν καθαιρούντες τὴν ξύλῳσιν*. Here the word *ξύλῳσις* is indefinite, but Pollux at least understood it to mean roof-timbers; cf. Poll. 7, 124: *ἐρέψιμα ξύλα, ἃ Θουκυδίδης εἶπε τὴν ξύλῳσιν*. If the houses had had columns of wood, these would have been carried off also.

Thuc. III, 68, 3: *καὶ ὀροφαῖς καὶ θυρώμασι τοῖς τῶν Πλαταιῶν ἐχρήσαντο*. If the houses of the Plataeans had had columns of wood, these would have been saved and used as well as the roof-timbers and the doors.

Eur. *H.F.* 1037-8: *λαῖνοις . . . κίῳσιν οἴκων*. The columns in the house of Heracles are imagined by Euripides as of stone.

Xen. *Mem.* III, 1, 7: *ἐπειδὴν δὲ ταχθῇ κάτω μὲν καὶ ἐπιπολῆς τὰ μήτε σηπόμενα μήτε τηκόμενα, οἳ τε λίθοι καὶ ὁ κέραμος, ἐν μέσῳ δὲ αἳ τε πλίνθοι καὶ τὰ ξύλα, ὥσπερ ἐν οἰκοδομίᾳ συντίθεται, τότε γίγνεται πολλοῦ ἄξιον κτῆμα οἰκία*. This is the most complete account we possess of the materials of a Greek house. Unfortunately it is possible to disagree as to the precise meaning of *τὰ ξύλα*. I understand them to be the timbers of floors and roofs, which, like the sun-dried bricks of the walls, are placed between the stone foundations and the roofing tiles. If this is right, there is no suggestion of wooden columns.

¹ Gerhard, *op. cit.* IV, 328.

Theophrastus, *Hist. Plant.* III, 14, 1; IV, 1, 2; 2, 8; V, 3, 3; 3, 5; 3, 7; 5, 2; 6, 1; 7, 6. In these passages Theophrastus refers to various kinds of wood as suitable for roof-timbers and for doors. Nowhere does he speak of columns. It may be added that the other authorities cited by Blümner, *Technologie . . . der Griechen und Römer*, II, 245-296, are equally silent, except for the reference in Pliny, *N.H.* XIV, 9, to columns of vine-wood belonging to a temple at Metapontum. It is reasonably safe to conclude that by the time of Theophrastus (ca. 300 B.C.) the use of wood for columns was negligible.

The evidence afforded by actual remains does not go back as far as the literary evidence. Such as it is, it points in the same direction. Thus a house or house-like building in Piraeus of the third or second century B.C. had limestone columns.¹ In Priene columns of stone occur in houses,² but no indication of wooden columns is reported. In the houses on the island of Delos columns of stone were the rule; wooden supports are reported in a single instance.³

Thus it appears that by 300 B.C., and probably by 400 B.C., there was little or no use of wooden columns in Greek domestic architecture, at least in Attica and regions similarly situated as to their timber supply. That conditions could have been entirely different in 500 B.C. appears to me improbable. Deforestation had been going on since a much earlier time,⁴ and suitable timber for building was becoming scarce, whereas easily worked stone was abundant. Why then, when columns were needed, should stone not have been generally used?

Then consider the combination of Ionic or quasi-Ionic columns with the regulae and guttae of the Doric architrave.⁵ In stone architecture, as known by extant remains, the contamina-

¹ *Ath. Mitt.* IX, p. 284.

² Wiegand & Schrader, *Priene*, pp. 287, 298.

³ *Bulletin de correspondance hellénique*, 1906, p. 647. These supports were square posts, not columns, as M. Vallois misleadingly calls them (*op. cit.* pp. 363, 376). As the author of the report in the *Bulletin* speaks of this case as differing "de la plupart des cours précédemment découvertes" he may know of other instances of wooden supports in place of stone columns, but apparently not. See his note 7 on the page referred to.

⁴ Plato, *Critias*, 111, c.

⁵ E. g. Hartwig, *Meisterschalen*, Pl. LIV; Pollak, *Zwei Vasen aus der Werkstatt Hierons*, Pls. I-III; *Antike Denkmäler*, II, Pl. 1.

tion of the two orders takes place very slowly. The earliest signs of it are in the Parthenon and the Theseum, in which, however, the integrity of the principal order is rigorously preserved. The Ionic buildings of the fifth and fourth centuries show no intrusion of Doric elements. Yet we are asked to believe that a combination which, except for its occurrence on a few vases, is unexampled before the Hellenistic period, was actually used a generation before the Parthenon. Does not this put a severe strain on our credulity?

On the other hand, there is no serious difficulty in supposing that the vase-painters, even the more accomplished ones, rendered with great inaccuracy the architecture which they had about them. People who are learning to draw do not succeed equally well with all the things they attempt. Some things are intrinsically more difficult than others, and some things may for one reason or another excite more interest than others, and so be more diligently practised. Thus the same vase-painters who rendered with all but perfect precision the human figure contented themselves with childish representations of trees. Similarly, while articles of household furniture on vases are generally well drawn, the grave monuments on Attic lecythi are seldom more than loose reminiscences of the actual monuments which the potters of the Ceramicus had almost at their doors. Why should the case not be the same with buildings? The excessive slenderness with which Doric columns are commonly drawn has its parallel in the excessive slenderness of the legs of horses as drawn in the black-figure style;¹ only for some obscure reason it maintained itself more persistently. As for the drawing of Doric regulæ and guttæ above Ionic or quasi-Ionic columns, it must be remembered that the Ionic order was probably not introduced into Attica till some time in the latter half of the sixth century, so that Ionic buildings which could serve as models were few. Indeed, it looks as if the vase-painters got suggestions for their Ionic columns to a considerable extent from pedestals of statues and legs of furniture.² Such models had no architrave, and if a painter chose to add an architrave,

¹ Vallois, *op. cit.*, p. 362.

² This applies to columns whose capitals are of the so-called Aeolic type; e.g. Hartwig, *Meisterschalen*, Pl. LIV.

it is small wonder that he should have drawn in careless fashion the Doric features to which he was most accustomed.

To sum up: I do not maintain that no decorator of Attic pottery in the sixth or fifth century B.C. ever saw a wooden column. That would be rash, especially in view of the various regions from which some of these decorators came. But I doubt whether wooden columns had any influence in determining the forms drawn on the vases, and I think it unsafe to draw any inference from the vases as to details of forms actually in use. Also I think it entirely unlikely that a "mixed order" existed at the time referred to, and I regard the occurrence of this combination on a few vases as an accidental anticipation of a development which was to take place three centuries or so later.

F. B. TARBELL.

UNIVERSITY OF CHICAGO.